

REMARKS

Applicants have carefully considered the positions of the Examiner, and respectfully request reconsideration based upon the manifest differences between the present invention and the cited references. Initially, applicants thank the Examiner for pointing out the typographical error in the Abstract and have amended it accordingly. Applicants have amended claims 1-8, canceled claims 9-12 and added new claims 13-24. Claims 1-8 and 13-24 are presented for further examination.

I. THE INVENTION

The present invention discloses an intelligent, modular server management system for enabling selective access, transparent control and operation of a plurality of remotely located computers from one or more user workstations. Further, the present invention provides efficient location, error detection and general status indication of the remote computers. The present invention preferably includes a computer interface unit coupled to each remote computer, a matrix switch unit and one or more user stations with a connected keyboard, video display and cursor control device. Alternatively, the present invention may be a "switch less" KVM solution that enables access and control of multiple servers from a single user console without the traditional KVM switch box and all the usual switch-to-server cables.

Each computer interface unit is connected to the matrix switch unit via a single networking cable, such as a CAT5 cable. The computer interface units receive signals from the remote computer and convert these signals to a format suitable for transmitting over the network cable. Further, each computer interface unit includes a signaling circuit

to emit a signal, which may be audible or visual, upon detection of a problem or receipt of a signal command from a user attempting to locate or find information about a specific remote computer. Additionally, the signaling circuit may transmit a message to the user workstation to inform a user of a problem with the remote computer or computer interface unit, general status (e.g., the completion of a firmware upgrade), etc. This message is generally displayed on the user workstation's monitor. In some instances, if an error is detected, a user at a user workstation may then access the remotely located computer and fix the problem.

Furthermore, the present invention does not require any additional software to be installed onto the remote computers. Advantageously, such a design eliminates any potential interference with the remote computer's operation or network performance. The present invention also allows several users simultaneous access, control and operation of the plurality of remote computers.

II. THE EXAMINER'S REJECTIONS

A. 35 U.S.C. § 112

In the Office Action dated May 19, 2005, the Examiner rejected claim 11 under 35 U.S.C. § 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. According to the Examiner, "said remote computer" as recited in claim 11 has no antecedent basis.

B. 35 U.S.C. § 102(e)

Next, the Examiner rejected claim 1 under 35 U.S.C. § 102(e) as being anticipated by North *et al.* U.S. Patent No. 6,505,245 (“North”). In the opinion of the Examiner, North teaches a remote management system comprising:

5 “a plurality of remote computers;... at least one interface unit for coupling
at least one keyboard, video monitor and cursor control device to said
remote computers, said user interface comprising circuitry for receiving
and transmitting keyboard, cursor control device and video signals;...
[and] a plurality of computer interface units, each of said computer
10 interface units being coupled to said remote computers, and each said
computer interface unit comprising circuitry for receiving and transmitting
keyboard, cursor control device and video signals, and a signaling circuit
for generating a signal at each of said computer interface units upon
detection of a specific event.”

15

C. 35 U.S.C. § 103(a)

Finally, the Examiner rejected claims 2-12 under 35 U.S.C. § 103(a) as being unpatentable over North as applied to claim 1 and further in view of Srinivasan *et al.* U.S.
20 Patent Application Pub. No. 2004/014835 (“Srinivasan”). In the opinion of the
Examiner, “it would have been obvious to one of ordinary skill in the art at the time the
invention was made to take the teachings of Srinivasan related to generating an audible or
visual signal in response to a detection of an event in a plurality of monitored computing
devices and have modified the teachings of North related to remotely monitoring and
25 controlling [a] plurality of network elements in a communication network in ‘order to
provide automatic notification as to any network server problems and to provide
corrective actions to be taken’.”

**III. THE EXAMINER'S REJECTIONS SHOULD
BE RECONSIDERED AND WITHDRAWN**

Applicants have amended claims 1-8, canceled claims 9-12 and added new claims
5 13-24, and herein respond to the Examiner's rejections by highlighting the differences
between the pending claims and the cited references such that it should become apparent
to the Examiner that these rejections should be reconsidered withdrawn.

A. 35 U.S.C. § 112

10 The Examiner rejected claim 11 under 35 U.S.C. § 112 as being indefinite for
failing to particularly point out and distinctly claim the subject matter which applicants
regard as the invention. Applicants have canceled claim 11 thereby rendering this
rejection moot.

15 **B. 35 U.S.C. § 102(e)**

Next, the Examiner rejected claim 1 under 35 U.S.C. § 102(e) as being anticipated
by North. Applicants respectfully submit that the Examiner's reliance on North is
misplaced and the rejection under 35 U.S.C. § 102(e) should be reconsidered and
withdrawn.

20 It is black letter law that for a reference to be anticipatory, it must teach each and
every claimed limitation. North falls far short of this requirement. Briefly, North
discloses a management system for managing computing devices on a computer network
from a common remotely located console and without the use of management agents at
each computing device. (See, e.g., col. 2, lines 40-44). Further, the computing devices

are arranged in logical groups and managed from a corresponding invocation of a management application residing on a management terminal.

As is more clearly set forth in amended claims 1-8 and new claims 13-24, the present invention is very different from North. First, North fails to teach a plurality of computer interface modules as claimed by the present invention. Rather, North's system merely couples a serial I/O port of each computing device directly to an event activity module of a central management terminal. The use of serial I/O communications limits the distance between the computing device and central management terminal. Therefore, North's system requires the computing devices and central management terminal to be in relatively close proximity.

Further, North is designed only to transmit and receive serial signals from the computing device for the purposes of detecting certain events that occur on the computing device. The event activity module itself is located within the central management terminal. Data output from the computing device is received by the central management terminal and transferred to the invocation associated with the computing device. Within the invocation of the management application, the event detection module determines whether the received output device data indicates that an event has occurred at the manageable device where the output data originated.

In contrast, the present invention claims a plurality of computer interface modules for enabling, *inter alia*, event monitoring as well as the access, monitoring and control of a plurality of remote computers from one or more local user stations. Significantly, utilizing computer interface modules enables efficient data transmission over an extended distance as the computer interface modules convert and compress data as necessary

before transmission to a matrix switch unit. Nowhere does North teach such a novel design. Indeed, such a design enables the signals to more efficiently traverse longer distances. Thus, the present invention does not require all the remote computers to be in a single location close to the switch (as required by North). In fact, the claimed invention
5 does not require the remote computers to be in the same room or even the same building.

In addition, the claimed computer interface units also receive and transmit keyboard, cursor control device and video signals from the remote device. Similarly, the user interface units receive and transmit keyboard, cursor control device and video signals. Furthermore, the computer and user interface units bi-directionally communicate
10 over a network (such as a LAN, WAN or the Internet). In many instances, this added functionality importantly enables a user at a user interface unit to remotely access a remote device when an event, such as a software malfunction, is detected on the remote device and remotely fix the problem. No where does North disclose the reception and transmission of keyboard, cursor control device and video signals thereby rendering
15 North incapable of enabling a user at a user interface unit to remotely access, control and fix problems on the remote device as if user was directly connected to the remote device.

Therefore, applicants submit that the Examiner's rejection of claim 1 in view of North should be reconsidered and withdrawn.

20 **C. 35 U.S.C. § 103(a)**

Next, the Examiner rejected claims 2-12 under 35 U.S.C. § 103(a) as being unpatentable over North as applied to claim 1, as previously discussed, and further in view of Srinivasan. In rejecting claims 2-12, the Examiner opines that it would have

been obvious to one of ordinary skill in the art to combine the teachings of North and Srinivasan. Applicants respectfully disagree. Initially, applicants submit that claims 9-12 have been canceled thereby rendering the Examiner's arguments with respect thereto moot. Applicants further submit that the even if the combination of North and Srinivasan
5 were proper, such combination does not teach the present invention as more clearly defined by amended claims 1-8 and new claims 13-24. As discussed above, North discloses a system for remotely controlling a set of computing devices on a computer network via a central management unit connected to the computing devices via serial I/O cables.

10 Srinivasan discloses a hardware and software monitoring system for a remote computer including an event monitoring module loaded on the remote computer. That is, Srinivasan requires an additional software program (i.e., the event detection module) to be installed on the remote computer, which raises the potential for interfering with remote computer's operation and network performance. The event monitoring module itself
15 includes a hardware detector that detects hardware events on the computer that may need attention and a software service detector that detects the status of software running on the remote computer to determine if any software has failed or is not operating properly. Srinivasan also discloses a graphical user interface for enabling an end user at the remote computer to make selections as to which software services and hardware events are to be
20 detected.

When an event is detected, information concerning the event may be sent a support site over a network whereby an online specialist can review the information, determine an appropriate action to take, and notify the end user of such actions to take in

order to correct a problem. The end user located at the remote computer must then take the appropriate action. As such, Srinivasan is limited to the monitoring of a single computer, whereby when an event occurs, a remote support staff specialist provides the end user with the appropriate steps to correct the problem. The end user at the remote
5 computer must actually fix the problem.

Even if it were obvious to one of skill in the art to combine the teachings, applicants submit that such a combination would not teach the claimed invention as suggested by the Examiner. The present invention is very different. In particular, the combination of North and Srinivasan fails to teach the claimed computer interface units
10 as well as remotely accessing and controlling a remote device to fix a problem on that device. The use of computer interface units eliminates the requirement that remote devices need be located in same room or even the same building. The computer interface units receive signals, including signals such as those indicative of the occurrence of a certain event, from the remote computer and convert these signals to a format suitable for
15 transmission over a network, such as a LAN, WAN or the Internet. By converting these signals near the remote devices themselves, the signals are thus able to efficiently traverse longer distances.

Further, the computer interface units eliminate the necessity for any additional software to be loaded onto the remote device. Instead, the computer interface unit itself
20 comprises all the necessary software and hardware (including event detection circuitry). Thus, the present invention is able to monitor for and detect certain events and problems without adding limitations such as those found in North and Srinivasan; such as distance limitations and potential interference with the remote computer's operation or network

performance. Furthermore, the present invention enables users to remotely access, control, as well as to remotely fix many problems on, a plurality of remote computers without requiring any additional software to be loaded onto the remote computer.

In view of the foregoing, applicants submit the Examiner's rejection of claims 2-
5 12 should be reconsidered and withdrawn. Furthermore, even if proper, combining North with Srinivasan does not teach, suggest or render obvious applicants' novel invention.

That is, as discussed above, both North and Srinivasan fail to teach a system and method for locating and detecting errors and the status of a plurality of remote devices, as well as remotely fixing detected problems and errors. North, along with Srinivasan, also fails to
10 teach a system which utilizes a plurality of computer interface units each coupled to one of a plurality of remote devices, whereby the remote devices do not need to be located in close proximity with one another. Therefore, upon closer review of the cited references, in view of the amendments and remarks made herein above, applicants submit that it will be apparent to the Examiner that his rejection should be reconsidered and withdrawn.

15 Further, applicants respectfully points out that, standing on their own, the cited references provide no justification for the combination asserted by the Examiner.

"Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under section 103, teachings of references can be combined only if there is
20 some suggestion or incentive to do so." *ACS Hospital Systems Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984) (emphasis in original).

The cited references provide no such suggestion or incentive for the combination suggested by the Examiner. Therefore, the obviousness rejection could only be the result of a hindsight view with the benefit of the applicant's specification. However,

5 "To draw on hindsight knowledge of the patented invention, when the prior art does not contain or suggest that knowledge, is to use the invention as a template for its own reconstruction -- an illogical and inappropriate process by which to determine patentability. The invention must be viewed not after the blueprint has been drawn by the inventor, but as it would have been perceived in the state of the art that existed at the

10 time the invention was made."

(citations omitted) *Sesonic v. Aerosonic Corp.*, 38 U.S.P.Q. 2d. 1551, 1554 (1996).

In addition, the combination advanced by the Examiner is not legally proper – on

15 reconsideration the Examiner will undoubtedly recognize that such a position is merely an "obvious to try" argument. North is unsuitable for enabling the event detection and monitoring of a plurality of computers over a large distance as taught and claimed for the present invention. Further, North is unsuitable for remotely accessing and fixing detected problems and errors on a remote device. Thus, it would not have been obvious to

20 combine the teachings of Srinivasan with those of North. Nothing in North or Srinivasan reveal any functional or design choices that could possibly include all of the applicant's invention. Accordingly, the present invention is not obvious and unpatentable over North in view of Srinivasan. At best it might be obvious to try such a combination. Of course, "obvious to try" is not the standard for obviousness under 35 U.S.C. §103. *Hybritech,*

25 *Inc. v. Monoclonal Antibodies, Inc.*, 231 U.S.P.Q. 81, 91 (Fed. Cir. 1986).

Under the circumstances, we respectfully submit that the Examiner has succumbed to the "strong temptation to rely on hindsight." *Orthopedic Equipment Co. v. United States*, 702 F.2d 1005, 1012, 217 USPQ 193, 199 (Fed.Cir. 1983):

“It is wrong to use the patent in suit as a guide through the maze of prior art references, combining the right references in the right way so as to achieve the result of the claim in suit. Monday morning quarterbacking is quite improper when resolving the question of nonobviousness in a court of law.” Id.

Applicant submits that the only “motivation” for the Examiner’s combination of North and Srinivasan is provided by the teachings of applicant’s own disclosure. No such motivation is provided by the references themselves.

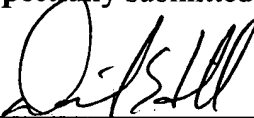
Therefore, as is evidenced by the above amendments and remarks, the present invention, for the first time, discloses a system and method for intelligent modular remote computer management for monitoring and detecting events at a plurality of remote devices as well as remotely fixing certain problems that arise. A system and method such as this is neither taught nor suggested anywhere in the cited references, including North and Srinivasan.

CONCLUSION

In view of the foregoing, applicants respectfully submit that the present application as claimed in claims 1-8 and 13-24 represents a patentable contribution to the art and the application is in condition for allowance. Early and favorable action is accordingly solicited.

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Respectfully submitted,



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